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MARKETING MIX IN E-COMMERCE

A Literature Review

Bachelor's Thesis
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Abstract

The purpose of this thesis is to examine McCarthy's marketing mix, that is, the 4Ps of marketing – product, price, place and promotion – in e-commerce literature and answer the research question *How are the 4Ps presented in the context of e-commerce?*. This is a current topic because e-commerce has experienced rapid growth in recent years and the evolution is still expected to continue. E-commerce has been said to reshape business processes and entire industries, bringing benefits for both the companies and the consumers. Thus, it could be assumed that the 4Ps in e-commerce are presented very differently compared to the traditional views on products, price, place and promotion.

The differences are indeed visible in the presentations of the Ps in the academic literature. When it comes to products, virtual and digital goods have emerged and have even replaced physical goods in some industries. Product assortment has grown remarkably and niche products generate a great amount of the online sales. Pricing, on the other hand, is described as dynamic and price discrimination seems to be popular, especially in the travel industry but also in retail. Place-wise the purchase in not connected to a physical place anymore as shopping is possible 24/7 in online stores. Also, the role of the Internet as a distribution channel is widely noticed, as it enables e-, multi- and omnichannel solutions. In the case of promotion, the Internet provides the infrastructure for online advertising. However, the biggest opportunity and challenge offered by e-commerce is the electronic word-of-mouth that facilitates the spread of both positive and negative experiences from consumer to consumer and hence, is rather difficult for companies to control.

Keywords e-commerce, marketing mix, 4Ps

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1. Introduction

The explosive growth of electronic commerce (e-commerce) together with the enormous popularity of online social networks is thoroughly influencing the global economy (Li and Ku, 2018). Only between 2014 and 2017, the worldwide e-commerce retail sales increased by 72 per cent and it is expected that by 2021 the sales have grown by 265 per cent since 2014 (eMarketer, 2018). The popularity of e-commerce is based on its benefits for both the consumers and the companies (Lin, 2003). These benefits contain, for example, faster buying and selling processes, 24/7 opening hours, ease of finding products, access to more customers, low operational costs and low barriers to entry (Niranjanamurthy, Kavyashree, Jagganath and Chahar, 2013). Thus, e-commerce is reshaping customer-supplier relationships, business processes and even entire industries (Daniel, Wilson and Myers, 2002). The driver behind the rise of e-commerce and its effects on the business landscape is the rapid development of the Internet and the World Wide Web (see, e.g., Kannan and Li, 2017). The Internet has enabled the emergence and growth of e-commerce since 1991 when the commercial use of the Internet was made possible (Mourya and Gupta, 2015).

Among all the other business processes, marketing is being affected by this development. The deep-rooted cornerstone of marketing, the so-called marketing mix – also known as the 4Ps of marketing – that refers to *product, place, price* and *promotion* (Dominici, 2009), can be found in the e-commerce environment, too. However, what is actually meant by the different Ps in the context of e-commerce where, for example, products do not limit to physical goods only (see, e.g., Lehdonvirta and Castronova, 2014) and it is easy to compare prices between retailers (Kannan and Li, 2017), has blurred. The purpose of this thesis is to analyze how the 4Ps are presented in the e-commerce literature in order to form and perceive the big picture of the topic.

The research question in this thesis is:
How are the 4Ps presented in the context of e-commerce?

Due to the rather thorough approach to the topic, the literature review is based on 109 sources, 92 of them being academic articles and conference papers and the rest being supporting statistics, reports and books. The majority of the academic articles were retrieved from three online databases: EBSCO, ScienceDirect and Emerald.

For the analysis, the thesis is divided into four main sections based on the 4Ps that follow a short background section about the evolution of the marketing mix framework and its elements. First, the literature review will take a look at the *product* element of the mix and such themes as product selection, the long tail and mass customization will be discussed. Second, the focus will be on *price*: the influence of e-commerce on pricing as well as on price discrimination. Third, the most ambiguous element in the e-commerce context, *place*, and its current trends like online marketplaces, showrooming and distribution through the Internet will be discussed. Lastly, the new opportunities, such as online advertising and the rise of electronic word-of-mouth, that e-commerce offers for promoting the products, will be viewed.

The generality of the marketing mix framework engenders some challenges with respect to what themes are covered in the literature review. Because some rather extensive topics, such as branding and product development, are related to the Ps, there is a need to restrain within some boundaries so that the review does not lose its focus. The criteria used for choosing the subthemes under the Ps are: (1) the connection to the themes discussed in the original marketing mix model, (2) the availability of reliable sources about the theme or reversely, the frequency of its occurrence in relevant literature as well as (3) the level of homogeneity of the approaches presented. For example, distribution channels and price determination have a close connection to the areas that the original model covers. Then again, related to place, for instance warehousing is left out of the review as there is not much academic research about it in the e-commerce context. On the other hand, online advertising is viewed rather roughly because most of the literature approaches the topic from completely different perspectives. Some discuss behavioral targeting or privacy whereas the others examine the role of animation in online advertisements so the review would become too broad and inconsistent. Hence, these constraints result in limitations as the review is not fully inclusive.

2. The Marketing Mix Framework

Due to its popularity in both academia and practice (Dominici, 2009), the marketing mix will be the framework for this thesis. The term *marketing mix* was brought to widespread public attention for the first time in 1953 when Neil Borden introduced it in his speech at the American Marketing Association (Dominici, 2009). However, the actual term was originally suggested by his associate James Culliton who described marketing functions as "mixing of ingredients" (Borden, 1984, p.8).

Borden's (1984) focus was on manufacturers and he listed twelve elements of the marketing mix: *product planning, pricing, branding, channels of distribution, personal selling, advertising, promotions, packaging, display, servicing, physical handling* as well as *fact finding and analysis*. Around the same time, McCarthy wanted to bring marketing planning into practice (Bennett, 1997). He took a more consumer-oriented approach but still maintaining the emphasis on manufacturers (McCarthy, 1960). He argued that a marketing strategy consists of two parts: the market target and the marketing mix and defined the latter as "the choice of the tools which the company intends to combine in order to satisfy . . . target group" (p.37). Unlike Borden (1984), he introduced only four elements of the mix, the so-called 4Ps of marketing: *product, price, place* and *promotion*. Despite the different number of elements, Borden (1984) and McCarthy (1960) have a very similar view on the subject. In practice, all of Borden's twelve elements fall under one of McCarthy's Ps. After the introduction of the 4Ps, the framework "has been widely adopted through time by managers and academics, becoming a key element of marketing theory and practice" (Dominici, 2009, p.17).

Originally, the marketing mix was developed in the North American market characterized by a massive domestic market, for example (Grönroos, 1990). In addition, the mix was born in an era when the focus was mainly on mass marketing (Constantinides, 2002). Since the 1960s, however, the marketing mix has experienced six "seismic shocks" that have reformed the field of marketing (Yudelson, 1999).

These are: (1) customer-focused approach, (2) expansion of marketing to include services and not-for-profits, (3) importance of exchange transactions that are beneficial for both parties, (4) focus on customer satisfaction, (5) change from transaction marketing to relationship marketing and (6) a company as a part of a value chain (Yudelson, 1999). In addition, the development of the Internet could be added to be the seventh "shock" due to its profound effect on marketing that is analyzed throughout this thesis. As Dominici (2009) argues, the communication and interaction possibilities offered by the Internet were completely unimaginable back in McCarthy's day. Yet, they have been major factors in transforming the customer behavior (Gurau, 2008). Because of the "shocks" described, the circumstances where the marketing mix was originally developed have changed drastically and thus, the marketing mix is claimed to have multiple limitations and shortcomings (see, e.g., Grönroos, 1990; Möller, 2006; Yudelson, 1999; Constantinides, 2006; Bruner, 1988). Although the purpose of this thesis is not to prove the mix wrong or unsuitable, it is still good to be aware of the large-scale criticism it has faced.

In fact, the marketing mix should rather be seen as a practical managerial tool or framework (Bennett, 1997; Grönroos, 1990), the purpose of which is to meet the needs of the target group (McCarthy, 1960) and gain the biggest profits possible (Grönroos, 1990) than as a solid theory. As McCarthy (1960) argues, the number of various mixes is infinite, meaning there are numerous strategies that combine the marketing mix elements differently. Likewise, he suggests the means applied to execute the Ps vary based on the situation concerned and there is no standard way of doing things correctly. Still, he offers some general definitions for the 4Ps that will be presented next.

The Marketing Mix Framework

Product	Price
• the benefit the customer derives or expects from purchasing the product • tangible and intangible goods • product development, packaging, branding etc.	• deciding the right price to get the products to the right place and to the target consumer accompanied by the right promotion • price determination, pricing objectives and policies etc.
Place	**Promotion**
• where, when and by whom the products are sold • problems, functions and institutions that affect the product delivery to the consumer • distribution channels, retailing, wholesaling, transporting, storing etc.	• the means to inform a target consumer about the products and services • promotional mix • personal and mass selling

Table 1: The 4Ps of marketing – product, price, place and promotion – by McCarthy (1960).

As seen above, the definitions of the 4Ps are rather vague and ambiguous, leaving a lot of leeway for what a product can be or how promotion should be carried out, for example. Regardless of the fact that McCarthy does give examples of bringing the Ps into practice in his book *Basic marketing, a managerial approach* (1960) where the marketing mix model stems from, his style is rather descriptive than normative. Thus, when analyzing the 4Ps in e-commerce in the following sections, the findings will not be contrasted with McCarthy's examples or descriptions, but the model will only give the structure for the review. Instead, the findings will be compared to brick-and-mortar businesses that have mostly applied the 4P model over time creating a sense of traditional execution practices of the 4Ps.

3. The 4Ps in E-commerce

E-commerce has a large number of different definitions that vary in scope. According to one rather narrow definition by DeLone and McLean (2004, p.31), e-commerce means "the use of the Internet to facilitate, execute, and process business transactions" and it includes a seller and a buyer who exchange goods or services for money. The broader definition suggests that e-commerce consists of all electronical information exchange between a company and its external stakeholders (Chaffey, 2015). Unlike the other definitions, the one by The World Trade Organization (2018) also takes the delivery of the goods into consideration, by describing e-commerce as "commercial transactions that are digitally-ordered and either digitally or physically delivered" (p.65).

Consumers had the very first opportunity to engage in e-commerce by purchasing products off their computers in 1992 and a few years after that, the e-commerce giants Amazon and eBay were launched (Mourya and Gupta, 2014). Ever since the early days, e-commerce has experienced massive growth (Li and Ku, 2018). According to the World Trade Organization (2018), global e-commerce amounted to 27.7 trillion US dollars in 2016 and perhaps surprisingly, the value of business-to-business e-commerce was six times that of business-to-consumer e-commerce.

Already in 1994, Rayport and Sviokla argued that in e-commerce "the traditional marketplace interaction between physical seller and physical buyer has been eliminated" (p.142). Along with the shift in interaction, e-commerce has led to multiple other changes in terms of the marketing mix: in the nature of products, in the importance of location as well as in pricing and in the ways of promoting products and services. The following four main sections will examine these changes in more detail and also highlight current trends and phenomena related to product, price, place and promotion.

3.1 Product

The rise of e-commerce has remarkably altered the product element of the marketing mix. In the 1960s when the mix was developed, there was no Internet for commercial use and thus, in the original definition, products mean either physical goods or services (see, McCarthy, 1960). According to Kannan and Li (2017), digital technologies change the products in three ways. First, they combine the actual product with digital services. Second, digital technologies make it possible for products to network which releases the inner value of the products. Third, they transform products to digital services. Compared to brick-and-mortar stores, customers have now a wider range of diverse products at hand (Tiago and Verissimo, 2014; Brynjolfsson, Hu and Smith, 2006) and the products are not just physical items sold and bought online but also so-called digital and virtual goods (Hamari and Keronen, 2017). Likewise, information can be seen as a product in the context of e-commerce (Allen and Fjermestad, 2001). As more and more consumers aim to express themselves through their consumption habits (Piller and Müller, 2004), companies have started to enable customization of products online, too. All these themes are discussed next.

Product Assortment, Niche Products and the Long Tail

Boysen, de Koster and Weidiger (2018) argue that due to the absence of expensive store spaces, online retailers are able to have a remarkably broader product assortment than brick-and-mortar stores. They also emphasize that niche products generate a larger part of the sales online than in traditional stores. The results of a study conducted by Brynjolfsson, Hu and Smith (2006) are comparable to these findings. The study shows that in the case of large online retailers, the number of products offered can be up to 75 times that of large brick-and-mortar stores. Brynjolfsson, Hu and Smith (2006) also analyze book sales on Amazon and find that niche books generate 30% to 40% of sales. They report that similar development can be observed in other markets, as well.

The phenomenon described above is called the long tail (Anderson, 2006; Elberse, 2008; Brynjolfsson, Hu and Smith, 2006). Anderson (2006), who can be seen as the inventor of the long tail concept, claims that the bigger number of goods available and an easy access to niche markets make the tail both longer and fatter as illustrated in *Figure 1*.

Theory: E-commerce lengthens and fattens the long tail

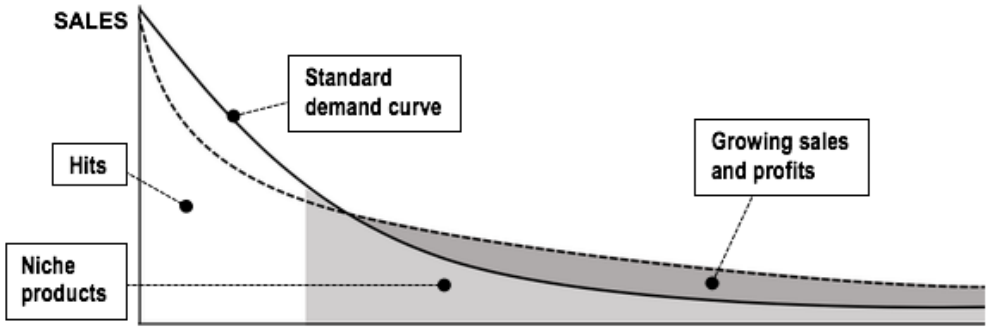

Figure 1: According to Anderson's (2006) theory, the shift in e-commerce from hit to niche products lengthens and fattens the tail (adapted from Elberse, 2008).

Brynjolfsson, Hu and Simester (2011) offer an additional explanation for the long tail by concluding "the Internet's long tail is not solely due to the increase in product selection but may also partly reflect lower search costs on the Internet" (p.1373). In contrast to Anderson (2006), Elberse (2008) observes the tail to become longer but also flatter instead of fatter. This means the number of items that sell rarely or never is increasing staggeringly (Elberse, 2008). Likewise, Oestreicher-Singer and Sundararajan (2012, p.81) notice that peer-based recommendations lead to "a more even or flatter distribution of both revenue and demand" meaning the demand is possibly shifting away from niche items and toward blockbusters. Thus, the evidence on the long tail phenomenon is largely contradictory and there would be room for further research on the topic. However, it seems to be rather safe to conclude that e-commerce has resulted in a wider product assortment and there is some kind of tail – fat or flat – accompanying the sales of the most popular products.

Digital, Virtual and Information Goods

In addition to the wider product selection, completely new products, that did not exist a few decades ago, have emerged. These are digital goods and virtual goods. Loebbecke (2003, p.635) describes digital goods as "goods that can be fully expressed in bits so that the complete commercial business cycle can be executed based on an electronic infrastructure such as the Internet". Huang, Lin and Fang (2017) simplify the definition to comprise all goods that can be digitalized and this simpler perspective gets support from Naldi and D'Acquisto (2008) who specify digital goods as "items that can be exchanged digitally" (p.11). In practice, all these definitions essentially refer to books, music, movies and other information items (Naldi and D'Acquisto, 2008; Huang, Lin and Fang, 2017) that can be digitalized and sold online. Compared with the previous definitions, Lehdonvirta and Castronova (2014) see digital goods as a hypernym of (digital) information goods and virtual goods. However, when giving examples of information goods, they also refer to music, software and e-books. Thus, it seems clear they are discussing the same products, only calling them differently.

Nevertheless, the recognition of the role of information is by no means irrelevant. Rayport and Sviokla (1994) state that the information about products replaces the products themselves in the information era. They also emphasize that information can be separated from the actual product or service and can sometimes become as important as the product itself in terms of its influence on profits. Allen and Fjermestad (2001) support this idea by suggesting that information *is* the product. The topic is illustrated in the following way:

"*An information good is defined as a good whose value is based on the information it contains . . . The actual material into which the information is encoded usually has little value. Wipe away the contents, and a DVD is just a worthless piece of plastic.*" (Lehdonvirta and Castronova, 2014, p.41)

Although the quote refers to physical information goods, it still shows the great value of information as a product. Information goods have special characteristics compared to physical products. According to economics, information is a public good, meaning it is nonexcludable and nonrivalrious (Mankiw and Taylor, 2014; Lehdonvirta and Castronova, 2014). Nonrivalrious means that one person's use of a good does not diminish another person's use whereas nonexcludable refers to the feature of a good whereby no one can be prevented from using the product (Mankiw and Taylor, 2014). Not surprisingly, the nature of digital information goods causes some challenges for the companies selling them. Wu and Chen (2008) emphasize that digital content can be easily pirated and shared online without degrading the quality. They argue that the digital form of the goods also enables a larger scale piracy compared to physical goods. Lehdonvirta and Castronova (2014) agree on the challenge caused by digital abundance. They suggest "it seriously disrupts the publishing industry's conventional business model of selling copies of information" (p.42).

Virtual goods differ from digital information goods due to their limited use and existence (Hamari and Keronen, 2017). Virtual goods refer to virtual products, such as items, avatars or currencies, that are sold to users of an online service (Hamari and Lehdonvirta, 2010), and they only exist in a certain virtual environment, such as in an online game world (Lehdonvirta, and Castronova, 2014). Their use is constrained by the rules of the virtual economy (Hamari and Keronen, 2017) and thus they can be made rivalrous and excludable unlike digital information goods (Lehdonvirta and Castronova, 2014). Another difference is that their value is based on their function whereas digital information goods derive their value from information (Lehdonvirta and Castronova, 2014).

Despite the fact that physical goods, such as clothing, shoes and consumer electronics, are still the most popular online shopping categories worldwide (We Are Social, 2018), the new types of intangible goods have become an integral part of e-commerce. Digital information goods now coexist with physical information goods and in some categories, such as music, the digital form is already replacing the physical one (IFPI, 2018). Although the digital format exposes the producers and the companies selling digital goods to piracy-related challenges, it would make sense that the special features of digital information goods would offer new opportunities and benefits, as well.

A case in point could be MOOCs (Massive Open Online Courses) that are online courses with free and unlimited participation and that are claimed to have "revolutionized universities and the corporate education landscape" (Kaplan and Haenlein, 2016, p.441). However, there seems to be no literature about the benefits and even most of the existing relevant literature about the digital information goods is rather old.

Electronic Mass Customization

Another interesting product-related trend in e-commerce is online mass customization. Piller and Müller (2014) argue that the modern-day customers demand individual products to express their personality and therefore companies have to focus on treating their customers individually. They suggest that mass customization is the solution. Pine (1993) defines traditional mass customization as a business model, where "stable but very flexible and responsive processes provide a dynamic flow of goods and services, enabling companies to achieve both low costs and high variety, even individual customization" (p.24). Wind and Rangaswamy (2001) argue that mass customization benefits both the customers and the company. They emphasize that from a customer's perspective, customized products meet the needs better whereas for a company, mass customization leads to higher customer loyalty and continuous innovation, for instance.

In spite of the fact that mass customization in its traditional form was conceptualized already in the 1990s (Salvador, de Holan and Piller, 2009), it is provided with new opportunities in the context of e-commerce. Namely, Kaplan and Haenlein (2006) argue that mass customization requires information about customers' wants and preferences, and thus, the Internet facilitates mass customization by making information collection and processing easier, for example through online user registration and cookies. They provide a definition for electronic mass customization describing it as:

"a strategy that creates value by some form of company–customer interaction at the fabrication/assembly stage of the operations level to create customized products with production cost and monetary price similar to those of mass-produced products, where at least one of the three market dimensions—player, product, and process—is digital." (p.178)

In an online environment, products can be mass customized using co-design (Lee and Chang, 2011). Co-design refers to customization where the customer can select the most suitable features from a range of design alternatives (Fiore, Lee and Kunz, 2004). Ives and Picolli (2003) give an example of one of the pioneers in the field of online mass customization, Land's End. Land's End, an American apparel company, utilized co-design by letting the online customers select a color, fit, fabric and collar style, just to name a few. Similarly, other well-known companies, such as Land Rover, Dell, Adidas and Nike, have sworn by online mass customization (Lee and Chang, 2011).

3.2 Price

Pricing in the online environment is a fascinating topic because, as Allen and Fjermestad (2001, p.17) emphasize, it is "the only element of the marketing mix to generate revenues". The Internet makes it more convenient for consumers to compare prices (Kannan and Li, 2017) and on the other hand, companies can use price to gain competitive advantage "by enhancing customer satisfaction and loyalty by meeting the demands of specific segments which have the potential to improve the firm's profit position" (Yelkur and DaCosta, 2001, p.252). However, there is no clear consensus in academia how e-commerce de facto affects the prices. There are multiple views on the topic and from time to time they are rather contradictory. However, the concepts behind these views are not new. Already in his work, McCarthy (1960, p. 631) discusses for example price discrimination, referring to it as "flexible-price policy" and also recognizes the influence of competition on price.

Dynamic Pricing and Online Price Discrimination

The pricing for online products and services is argued to be more dynamic (Kannan and Li, 2017; Kalyanam and McIntyre, 2002; Haws and Bearden, 2006) due to four reasons. First, the search costs, that is, the time or money a consumer spends on finding a product to buy, are low. Second, the menu costs, that is, the costs to a company resulting from changing the prices of products or services, are low, too (Kannan and Li, 2017). Third, there are quick changes in the buying environment and lastly, retailers are able to respond to the searches of customers almost immediately (Kannan and Li, 2017). Haws and Bearden (2006, p.304) describe dynamic pricing as "individual-level price discrimination" and "a strategy in which prices vary over time, consumers and/or circumstances".

Online price discrimination basically means showing different prices of the same product to different customers (Maxwell and Garbarino, 2010). Already at the beginning of the 2000s, Odlyzko (2003) noted that price discrimination would increase in the future due to two reasons. The first reason would be the change in the cost structure: fixed one-time production costs would become more common, with low marginal costs. For example, developing a software costs hundreds of millions of euros but its distribution online costs almost nothing. The second reason would be the modern technology that enables price discrimination on a completely new level. Especially, travel industry seems to have adopted many of the price discrimination practices. For example, Hannak, Soeller, Lazer, Mislove and Wilson (2014) discover that up to four out of five travel sites performed price discrimination online. Stavins (2001), who focuses on the airline market in her study, finds that there is more price discrimination on routes with more competition and discrimination diminishes with market concentration. Jiang (2007) adds opaque selling to the discussion. He describes opaque selling as a form of online price discrimination, that is mostly applied to flights, hotels, cruises and car rentals. He argues that the term refers to a practice where sellers do not reveal all the product or service details, such as the departure time of the flight or the number of transfers, to the customers, which results in some customers paying lower prices than the others who have gotten more information about the product.

However, online price discrimination is not an unknown phenomenon in retail either. Hannak et al. (2014) discover that four out of ten general retailers used price discrimination techniques on the Internet. Mikians, Gyarmati, Erramilli and Laoutaris (2013) find out that product type and the location of a consumer affect online price discrimination whereas personal information of users seems to have no effect. They show that the range of price variations is between 10 and 30 per cent for most e-tailers and the highest variation occurs in the case of the cheapest products. When it comes to location, Mikians et al. (2013) conclude locations in Europe usually get higher prices compared to locations in USA and Brazil and Finland is the most expensive location in Europe. In the case of consumer packaged goods, the Internet also enables personalized promotions that can be updated based on previous purchase information (Zhang and Krishnamurthi, 2004).

The Effect of the Internet on Price

Tiago and Verissimo (2014) argue that the online environment leads to more competitive prices. Yelkur and DaCosta (2001) agree on this but they annotate that the extreme price competition occurs only in the case of similar products as the other factors that contribute to competition, such as location, are absent online. They suggest that when products or services are remarkably different, the Internet can actually help with segmentation, which can be seen in the hotel industry. Similarly, Allen and Fjermestad (2001) approve the idea of increased price competition but they argue that the Internet leads to standardized prices, too. Although the concept of standardized prices is just the opposite of dynamic prices and seems to get no support from other researchers, it is not far-fetched on a theoretical level. As the basic economic theory suggests, in a perfect market, the market price is the intersection of demand and supply and thus, it is given to everyone in the market (see e.g. Mankiw and Taylor, 2014). Although perfect competition is just a hypothetical model, according to Marburger (2012) the growth of the Internet was indeed predicted to result in the law of one price as consumers would be able to compare prices in real time.

He argues, however, that eventually just the opposite happened: the Web became the platform where numerous buyers and sellers are now able to find a price that fits the both parties and the prices still vary heavily.

Yelkur and DaCosta (2001) argue that in an online environment, sellers can charge *higher* prices "based on the match between the buyer's needs and the nature of the product offering" (p.254). They also emphasize that in a traditional environment, such personalization would be rather expensive. This is in line with the concept of dynamic pricing. According to Venkatesan, Mehta and Bapna (2006), higher prices have a connection to the retailer channel structure. They argue that the national brick-and-click retailers, that is, a combination of a brick-and-mortar store and an online store, have higher prices than traditional retailers. They also suggest this is because of "the trust they engender among online shoppers given their national presence and associated brand recognition, and the increased convenience they provide to consumers" (p.1774). However, there are also differing views on the topic. For example, Zettelmeyer, Morton and Silva-Risso (2006) dispute the idea of higher prices by claiming the Internet *lowers* prices because consumers are better-informed and they can acquire lower prices through a referral process. However, their survey only investigates the automotive industry and thus, the generalizability of the results should be treated with caution.

The electronic mass customization discussed in the previous part also affects the pricing decisions of companies who let their customers customize the products. Kaplan and Haenlein (2006) argue that the price of mass-customized products should be the same or just a bit higher than the price of mass-produced products. In contrast to Kaplan and Haenlein (2006), Franke and von Hippel (2003), who studied customer satisfaction with the security features of a software, find out that the users would be willing to pay 50% more in order to get customized features that meet their needs perfectly. Similarly, Piller and Müller (2004) conducted a study on the willingness to pay for customized footwear. The results show that the majority of both men (46%) and women (42%) would accept a ten to thirty per cent increase in the price compared to normal shoes.

Thus, it seems that unlike Kaplan and Haenlein (2006) claim, customers would actually accept a rather noticeable increase in price in exchange for enhanced satisfaction.

3.3 Place

In contrast to brick-and-mortar stores that emphasize the importance of great location, in e-commerce, the physical location has become somewhat irrelevant. From a consumer's point of view, a purchase is not attached to a certain place anymore but can be made in an online store anywhere where there is an Internet connection (Allen and Fjermestad, 2001). Jiang, Yang and Jun (2103) argue that online stores provide so-called access convenience – flexibility in terms of time and place. They conclude that these stores decrease crowding, waiting times and traveling to stores whereas the consumers get access to products and stores that are not located close to their homes. Similarly, other new distribution channel solutions have emerged, enabling faster deliveries and cost reductions (Boysen, de Koster and Weidiger, 2018; Taleizadeh and Sadeghi, 2018).

Internet as a Distribution Channel

McCarthy (1960) defines a channel of distribution as "any sequence of institutions from the producer to the consumer, including none or any number of middlemen" (p.324). Related to the original place element of the marketing mix, he presents that, conventionally, there has been four possible distribution channels in B2C sales (Figure 2). Most of them rely on retailers and wholesalers as intermediaries between manufacturers and consumers. However, he emphasizes that the channels still do not limit to these four options.

The traditional B2C distribution channel structures

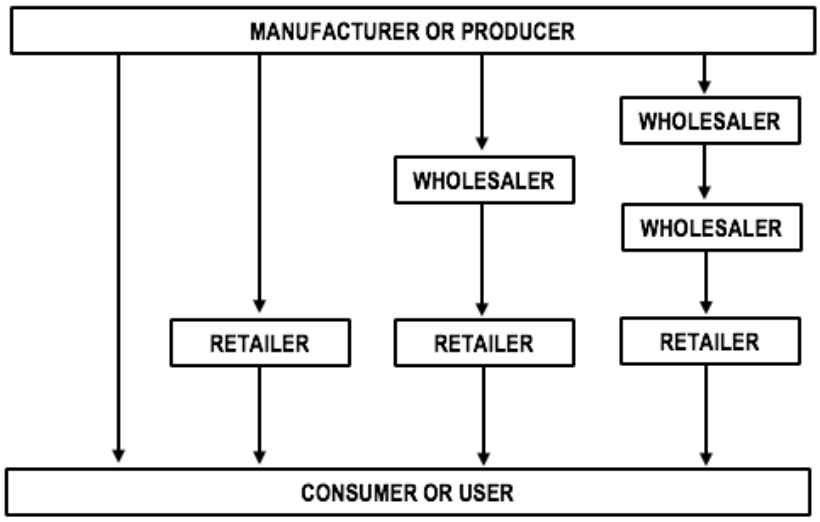

Figure 2: The four conventional distribution channel structures (adapted from McCarthy, 1960).

In addition to these traditional channel structures, the Internet has been added to the channel selection. Kiang, Raghu and Shang (1999) argue that the Internet as a distribution channel reduces delivery costs and enables instant deliveries. They also emphasize that it shortens supply chain and lowers operating costs by eliminating space rentals, utilities and the like. Barutçu and Tunca (2012) support this as they discuss electronic supply chain management (E-SCM) and stress that E-SCM has enabled better information exchange, lower inventory levels and higher quality levels, for example.

So-called *e-channels* have been introduced in the context of e-commerce. Wagner, Schramm-Klein and Steinmann (2018) emphasize that e-channels represent the hardware options, such as devices that have an access to the Internet, which consumers can use for online shopping. Taleizadeh and Sadeghi (2018) argue an e-channel is a means to connect customers and manufacturers directly. According to KPMG (2016), laptops and personal computers are still leading smartphones and tablets as the devices for online shopping. However, there are regional differences and Asians are more favorable about using smartphones for shopping purposes than others.

Wagner, Schramm-Klein and Steinmann (2018) also discuss *e-channel touchpoints* that are the software options, for example mobile shopping apps, that retailers offer for the e-channels.

Abhishek, Jerath and Zhang (2016) argue that the role of *e-tailers*, in other words online retailers, has recently started to shift from being a reseller to being an agency seller. They suggest that usually, e-tailers purchase products from manufacturers, reselling them to online consumers but now some big retailers, such as Amazon and Sears, are letting manufacturers interact with consumers directly on a retailing website by paying a fee. This means the companies operate the online *marketplaces* (Hagiu and Wright, 2015) that will be discussed in the next section.

Online Marketplaces

Bakos (1998) sums up the three main functions of markets: matching sellers and buyers, facilitating transactions and providing institutional infrastructure. He argues electronic marketplaces have a huge influence on these functions by improving effectiveness, lowering costs and leading to more efficient markets in general. Pavlou and Gefen (2004) define online marketplaces as "communities of buyers and sellers who exchange product information, coordinate, and transact using Internet technologies" (p.40). Compared to Pavlou and Gefen (2004), Sun (2010) adds an intermediary, in other words a firm providing the marketplace and its technology, to the main components of the online marketplaces along with sellers and buyers. By selling products through the online marketplace, sellers expand the number of prospective customers and despite the intermediary, retain the control over the goods sold (Ryan, Sun and Zhao, 2012).

A special feature of the online marketplaces is that the transactions take place between sellers and buyers who have little or no prior interaction (Pavlou and Gefen, 2004). Thus, online marketplaces face challenges in terms of trust. Zacharia and Maes (2000) present two main issues. First, buyers have no access to the product they are buying which can lead to sellers' unethical behavior, for example lying about its condition. Second, sellers or buyers may not follow the agreement made at the marketplace. They can try to renegotiate the prices or refuse to pay for a product they already received.

After analyzing data from Amazon's online auction marketplace, Pavlou and Genfen (2004) argue "[t]he institutionalization of trust can be a primary means of building effective online marketplaces, especially in the absence of familiarity, similarity, and well-established legal recourse" (p.54). Another study about the trust-building potential of text arguments based on eBay's marketplace data shows that text comments written by neutral parties, who do not necessarily aim to build trust, can still enhance buyers' trust (Pavlou and Dimoka, 2006). Compared to Pavlou and Dimoka (2006), Sun (2010) takes the seller's perspective and finds out affective trust has a great effect on seller's continued use of online marketplaces, too.

Recent Trends in Distribution Channels

Although many companies in the e-commerce era remain or are born as so-called virtual merchants or pure-play retailers that have no physical presence (Doherty and Ellis-Chadwick, 2010), omnichannel businesses are increasingly widespread (Chen, Cheung and Tan, 2018). Omnichannel retailing can namely utilize different channels, such as brick-and-mortar stores, the Internet and social media, simultaneously (Kang, 2018; Chen, Cheung and Tan, 2018). The ability to combine channels becomes especially important when consumers search information in one channel but purchase in the other, as is the case with showrooming and webrooming presented later. Also, multi-channeling, which refers to traditional retailers operating online stores, has become highly common (Visse, Nemoto and Browne, 2014).

Visser, Nemoto and Browne (2014) define click and collect as a multi-channel solution of large traditional retailers that combines purchasing on the Internet and picking the order at the store. They suggest that the advantages of the click and collect practice are a wider range of products and certainty about the product availability. Hence, click and collect combines the strong points of both physical and online stores (Beck and Rygl, 2015). Piotrowicz and Cuthbertson (2014) argue that click and collect is particularly suitable for smaller items whereas bigger items that need more space can be ordered in special showrooms and then delivered home. There are three different click and collect models (Hübner, Kuhn and Wollenburg, 2016): in-store, central warehouse and fulfilment center.

This means the order can be either picked in the retailer's physical store, in an integrated central warehouse or in "dedicated dot-com-only fulfilment centers" (p.237). Jara, Vyt, Mevel, Morvan and Morvan (2018) discover that the customer benefits of click and collect vary regarding which model is used and how old the customer is.

On the other hand, e-commerce has given rise to two distinct trends in omni-channeling (Kang, 2018) that consumers use to exploit online and offline channels when deciding where to make the purchase. These are showrooming – also known as the "research shopper phenomenon" (Verhoef, Neslin and Vroomen, 2007, p.129) – and webrooming. Showrooming is a phenomenon in which consumers search for information offline but eventually purchase the product online whereas in webrooming the information search takes place online but the product is bought in-store (Fernández, Pérez and Vázquez-Casielles, 2018).

In the US, 68% of consumers showroomed in 2014 (PwC, 2015). Daunt and Harris (2017) argue that showrooming is a challenge to companies and represents a form of value co-destruction as consumers on purpose benefit from information and services of one retailer, still buying from another retailer and in a different channel. Similarly, Rapp, Baker, Bachrach, Ogilvie and Beitelspacher (2015) agree on the trickiness of the current situation and emphasize that retailers do not know how to react to this change. Also Sit, Hoang and Inversini (2018) argue that showrooming is seen as a threat to brick-and-mortar retailers. In turn, Gensler, Neslin and Verhoef (2017) focus on explaining what the factors influencing showrooming are. They discover that perceptions about better quality and price online as well as price differences between online stores have a positive influence on showrooming. On the other hand, online search costs, lack of sales personnel online and consumer's time pressure have a negative influence. However, Fernández, Pérez and Vázquez-Casielles (2018) show that showroomers are more likely to buy more expensive products. They suggest that "rather than fighting e-commerce . . . retailers must develop omnichannel strategies" (p.309) so that despite showrooming, consumers would end up buying the product on the retailer's online store.

Compared to showrooming, webrooming was slightly more common in the US with 73% in 2014 (PwC, 2015). Fernández, Pérez and Vázquez-Casielles (2018) argue the purchasing process of webroomers is rather long and they look for specific information about the alternatives. They suggest that retailers should pay special attention to the virtual touchpoints, such as web pages, used by these consumers so that they find the information needed. Falvián, Gurrea and Orus (2016) highlight that consumers engage in webrooming to decrease the feeling of uncertainty about the purchase. They also argue that webrooming leads to a stable preference and lowers the probability of switching to a competing product at the store.

These trends show that the growth of e-commerce has not only led to "online only" solutions in terms of distributing products but also to numerous combinations of different channels. However, this development has not come without side effects, as the roomings prove. Despite the speculations of the possible death of brick-and-mortar business caused by e-commerce, Dennis (2018) reminds that physical retail is still alive and well but also evolving. Thus, as the views above also suggest, companies should realize the opportunities that the combinations of e-commerce and brick-and-mortar have to offer and turn the now somewhat negative side effects into possibilities.

3.4 Promotion

Gurau (2008) suggests the fast development of the Internet has reshaped the traditional communication practices because it differs from all the other communication channels due to its interactivity, transparency and memory. This means the Internet enables interactive communication between individuals and software, makes information accessible for all and also stores information. Likewise, Lagrosen (2005) concludes that the majority of the companies in his study argued that "the greatest benefit of the Internet compared to other communication tools is that it gives a possibility for two-way communication" (p.65). Kannan and Li (2017) argue the Internet provides multiple new ways to reach customers and promote products and similarly, Batra and Keller (2016) state that technological development has reshaped the marketing communications environment offering new challenges and chances to marketers.

However, the control of promoting goods seems to be shifting from companies to consumers. Mangolds and Faulds (2009) emphasize that in the traditional marketing communications, the elements of the promotion mix – advertising, personal selling, PR, direct marketing and sales promotion – are controlled and implemented by the company and its paid agents, such as advertising agencies. They argue that the rise of social media – which can be defined as "a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of User Generated Content" (Kaplan and Haenlein, 2011, p.254) – has weakened this control because information about products and services is now also created in the marketplace by consumers. Namely, the Internet and social media has given viral marketing and electronic word-of-mouth new proportions (Chu and Kim, 2011; Leskovec, Adamic, Huberman, 2007).

Online Advertising

Online advertising – also called Internet advertising (Robinson, Wysocka and Hand, 2007) and web advertising (Choi and Rifon, 2002) – has experienced exponential growth since 1994 when the first banner ads were placed online (Ha, 2008). Evans (2009) argues that "online advertising is disrupting all aspects of the global advertising industry . . . changing how creative work is done, how advertising campaigns are run, and how advertising is bought and sold" (p.38). This claim is easy to believe because according to the internet advertising revenue report of the Interactive Advertising Bureau, in the US, internet advertising has already bypassed TV advertising and its growth between 2016 and 2017 was 21 per cent (PwC, 2018). Meanwhile, the popularity of traditional media, especially newspapers, is decreasing (Evans, 2009). Ha (2008) defines online advertising as messages that are located on third-party websites and search engines. It can take the form of, for example, banner ads (Choi and Rifon, 2002; Robinson, Wysocka and Hand, 2007), search ads, pop-up ads, rich media ads as well as online auctions and online affiliates (Ha, 2008).

Integrated Marketing Communication

Ivanov (2012) argues that despite the popularity of the Internet as a marketing tool, online marketing communications should not be seen as the only means to spread the company's marketing messages. She further emphasizes that marketing communications should rather be approached from an integrative perspective that considers consumer needs, databases, integrated media and stakeholder communication. With this, she refers to integrated marketing communications (IMC). Grein and Gould (1996) argue that according to the conceptualization of the IMC, the company can gain competitive advantage by utilizing multiple promotional communications simultaneously. Likewise, Kitchen and Burgmann (2010, p.1) highlight that "IMC can help in creating coordinated and consistent messages across various channels of communication".

Gurau (2008) introduces a tentative model of integrated marketing communication for e-commerce. He suggests a three-phase process where the marketing message first integrates the company's main values, second, is adapted to the objectives of the online campaign and third, is modified so that it is suitable for the target audience. Bapna and Keller (2016), in turn, propose two communication models to enhance the effectiveness of IMC programs: top-down communications optimization model and bottom-up communications model. The former focuses on identifying communication alternatives that are most likely to fulfil the consumers' information needs during the purchase decision process. The latter, on the other hand, is a tool for evaluating the suitability of a marketing communication program in terms of both long-term brand equity and short-term sales.

Viral Marketing and Electronic Word-of-Mouth

Despite the marketer-controlled approaches described above, the role and power of consumers in creating and sharing marketing messages is increasing. Although the term viral marketing was first introduced in 1996 and thus is not a new phenomenon, social media provides it many more possibilities (Kaplan and Haenlein, 2011).

Ho and Dempsey (2010) describe that in viral marketing, the marketer creates electronic content that is posted online and forwarded by Internet users. Viral marketing can occur as influencer marketing, viral videos or guerilla marketing campaigns (Ferguson, 2008), just to name a few. Just like Ho and Dempsey (2010), Leskovec, Adamic and Huberman (2007) argue that viral marketing utilizes social networks by spurring consumers to share product-related information with their acquaintances. In practice, viral marketing can be seen as the cause and word-of-mouth as the effect (Ferguson, 2008). Hence, viral marketing has a close connection to electronic word-of-mouth (see, e.g., Ho and Dempsey, 2010; Kaplan and Haenlein, 2011).

Electronic word-of-mouth (eWOM) has been suggested to be a new addition to the promotion mix (Chen and Xie, 2008; Mangold and Faulds, 2009). According to Litvin, Goldsmith and Pan (2008), electronic word-of mouth refers to "informal communications directed at consumers through Internet-based technology related to the usage or characteristics of particular goods and services, or their sellers" (p.461). In contrast to the previous definition, Henning-Thurau, Gwinner, Walsh and Gremler (2004) emphasize the role of consumers as the information sources. They describe eWOM as "any positive or negative statement made by potential, actual, or former customers about a product or company, which is made available to a multitude of people and institutions via the Internet" (p.39). It could be argued that the latter definition is more valid as the power of eWOM is especially based on its interpersonal nature (see, e.g., Bickart and Schindler, 2001). For example, product reviews posted online by customers are one of the main types of eWOM (Sen and Lerman, 2007). What makes eWOM special, is the anonymity and confidentiality the Internet provides for the ones seeking or sharing advice (Goldsmith and Horowitz, 2006).

Litvin, Goldsmith and Pan (2008) argue interpersonal influence and word-of-mouth are the most influential sources of information nowadays when making purchase decisions. The findings of Bickart and Schindler (2001) support this as they discover eWOM is more effective than company-led marketing activities in generating product interest. They suggest the reasons behind this are better credibility, relevance and the ability of online forums to generate empathy.

Similarly, Chen and Xie (2008) agree on the relevance of consumer-created information. They illustrate the differences between seller-created and consumer-created information by describing the former as product-oriented and the latter as user-oriented, hence being more relevant. In addition, Lee and Youn (2009) note that also eWOM platforms can be either marketer-generated or non-marketer-generated. The marketer-generated websites, such as brand websites, allow the owner of the site to add or delete information so that it favors their purposes (Lee and Youn, 2009). However, Xue and Phelps (2004), who tested the widely accepted assumption that consumer comments posted on independent websites (compared to the possibly manipulated company websites) are more persuasive, did not find any empirical evidence to support the claim. Thus, eWOM seems to affect purchase decisions to a great extent but its placement does not have an influence on persuasiveness as long as the content itself is created by fellow consumers.

Electronic word-of-mouth is somewhat problematic from a company's perspective. Whereas positive eWOM emphasizes the advantages of products or services and recommends to purchase, negative eWOM highlights the problems and suggests not to buy (Cheung and Thadani, 2012). Sen and Lerman (2007) discover that there is also a negativity bias for utilitarian products, meaning consumers pay more attention to negative information when buying practical and functional products. That combined with the fact that eWOM is highly scalable and rapid to spread (Cheung and Thadani, 2012) can lead to a loss of control as in the case of United Airlines who mishandled an expensive guitar causing negative eWOM to spread all around the Internet in just a few days (Deighton and Kornfeld, 2010). As Litvin, Goldsmith and Pan (2008) conclude, marketing professionals have to learn "how to control, and not be controlled, by this new and powerful force" (p.466).

4. Discussion

The purpose of this literature review was to outline how the rapid development of e-commerce spurred by the Internet and social media affects the marketing landscape. E-commerce was defined as transactions and information exchange between the consumers and the companies, taking place online. Jerome McCarthy's 4Ps of marketing – product, price, place and promotion – provided the framework for the review. By examining the academic literature, the goal was to answer the research question *How are the 4Ps presented in the context of e-commerce?*. The main findings are summarized below.

Product. Despite the fact that physical goods still are the most popular goods exchanged in e-commerce, the literature shows clear evidence that the product element of the mix is not limited to physical goods only. Namely, two new types, virtual goods and digital information goods, have emerged. In general, e-commerce has led to a wider range of products and sales have started to shift from a few hit products to niche products. This development has an effect on the long tail, although the researchers have differing views on whether the tail becomes fatter or flatter. Lastly, consumers now require individual products. Due to the advancements in e-commerce, mass customization online is possible and also cost-effective compared to offline stores.

Price. E-commerce benefits consumers in terms of price by facilitating price comparisons and meanwhile, companies can gain competitive advantage with pricing. Otherwise, the question about the effect of e-commerce on price turns out tricky. Some researchers argue that e-commerce lowers the prices whereas the others claim the influence is just the opposite. Although there is no clear consensus about the issue, it can be stated that at least e-commerce has not resulted in the law of one price as was assumed earlier. In fact, the literature supports the concept of dynamic pricing that refers to changes in prices over time and circumstances. Also, price discrimination is common, especially among companies operating in travel industry.

Place. The place element of the mix could be argued to differ the most between brick-and-mortar business and e-commerce as there is no physical place of purchase in e-commerce. Consumers can shop online when and where they like. The place-related literature focuses on online marketplaces, that bring together buyers and sellers unfamiliar to each other. Likewise, the potential of the Internet as a distribution channel has been noted by retailers as it lowers costs and enables instant deliveries, for example. Also, multichannel distribution that combines online and offline stores has gotten its part of attention. One of these combinations is click and collect that enables picking of online purchases at a store. However, the multi- and omni-channel solutions have made opportunistic customer behavior possible in the form of showrooming and webrooming.

Promotion. E-commerce has reshaped the marketing communications by introducing the whole range of online advertising tools. However, the integrated marketing communications, that combine multiple commercial channels, is argued to be the right approach to modern promotion. At the same time, the control of promotional messages is moving from companies to consumers, as the Internet and social media enable the rapid spread of electronic word-of-mouth.

Limitations

Naturally, there are some limitations in this thesis. As mentioned in parts 1 and 2, the marketing mix framework is rather ambiguous as it only offers some general definitions for the Ps and does not set strict rules about how the framework should be applied. This caused some challenges in terms of which themes to include in the literature review. Eventually, the themes were chosen based on three criteria: the connection to the themes covered in the original model, the availability of reliable sources and the similarity of approaches to the theme. However, these criteria lead to limitations because some themes that could have been relevant, had to be left out in order to avoid loss of focus.

The B2C approach is another limitation. Although McCarthy (1960) considers both the final consumers, meaning the households, and the intermediate consumers, that is, companies taking part in the supply chain, this thesis is only focused on business-to-

customer interactions. There are two reasons for that. First, the e-commerce related literature deals mostly with B2C sales and thus there is more information available. Second, B2B and B2C differ quite a lot in terms of the Ps and the review would have become too extensive and complex if both had been considered. However, the B2C approach is not expressed in the research question because most of the academic articles used do not explicitly state that their focus is on B2C sales, although this can be interpreted between the lines, or that their findings would limit to B2C sales only.

The third limitation is that the criticism about the shortcomings of the marketing mix was mainly ignored. This was a conscious choice as the mix was threated more as a given framework.

Further Research

Despite the authors having quite similar views and findings on most of the themes discussed in this thesis, there are a couple of topics that would have some room for further research. These are the effects of e-commerce on the long tail and price. The results of existing research appear very inconsistent and even opposite with respect to these topics. However, some articles discussing the long tail and price are rather old and thus, the information may be already outdated. Hence, new empirical research could better shed light on the current state of these themes.

Reliability of Sources

The sources, that the thesis is based on, are mostly academic articles published in peer-reviewed journals and have also been frequently cited by other authors. Some of the articles focus only on one specific industry, which obviously affects the generalizability of the results, but usually this has been taken into consideration. The other sources – books, statistics, non-academic articles and reports – have been used as support or background. Thus, it could be argued that the reliability of the sources used should be good.

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